

Abstract

The object of the invention is a bearing mat for supporting an exhaust gas catalyst in the form of a binding agent-free, multi-layered flat structure consisting of thermally stable threads, said flat structure being mechanically reinforced by quilting seams. The threads consist of a crimped yarn consisting of filaments and are fixed in the flat structure by the quilting seams under tensile stress. The quilting seams are produced with a sewing thread whose thermal stability is lower than the operating temperature of the bearing mat. Furthermore, the object of the invention is a process for producing the mat, in which crimped yarn consisting of thermally stable filaments is taken off from rolls in a plurality of strands and placed under tensile stress on a transporting device moving transversely to the take-off direction in order to form a plane, multi-layered flat structure. The flat structure moved on with the transporting device is mechanically reinforced with quilting seams in such a way that the threads continue to be under tensile stress when the flat structure is removed from the transporting device.

(Single figure)